# STANLEY. Infrastructure

Safety, Operation & Maintenance

# TA54 Hydraulic Tamper

62288 User Manual 2/2022 Ver. 20

DECLARATION OF CONFORMITY
ÜBEREINSTIMMUNGS-ERKLARUNG
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STANLEY.
Infrastructure

I, the undersigned: Ich, der Unterzeichnende: Je soussigné: El abajo firmante: lo sottoscritto:

Gunishetty, Shravan Kumar

Surname and First names/Familiennname und Vornamen/Nom et prénom/Nombre y apellido/Cognome e nom

hereby declare that the equipment specified hereunder: bestätige hiermit, daß erklaren Produkt genannten Werk oder Gerät: déclare que l'équipement visé ci-dessous: Por la presente declaro que el equipo se especifica a continuación: Dichiaro che le apparecchiature specificate di seguito:

 Category: Kategorie: Catégorie: Hydraulic Hand-Held Tamper

Categoria: Categoria:

- 2. Make/Marke/Marque/Marca/Marca
- 3. Type/Typ/Type/Tipo/Tipo:
- Serial number of equipment:
   Seriennummer des Geräts:
   Numéro de série de l'équippement:
   Numero de serie del equipo:
   Matricola dell'attrezzatura:

STANLEY TA5410301

**ALL MODELS NOTED ABOVE** 

Has been manufactured in conformity with Wurde hergestellt in Übereinstimmung mit Est fabriqué conformément Ha sido fabricado de acuerdo con E' stata costruita in conformitá con

Directive/Standards	No.	Approved body
Richtlinie/Standards	Nr	Prüfung durch
Directives/Normes	Numéro	Organisme agréé
Directriz/Los Normas	No	Aprobado
Direttiva/Norme	n.	Collaudato
EN ISO	12100:2010	Self
EN ISO	4413:2010	Self
EN ISO	28927-6:2009	Self
EN ISO	3744:2010	Self
EN ISO	11148-4:2012	Self
EN ISO	13732-1:2008	Self
Machinery Directive	2006/42/EC:2006	Self
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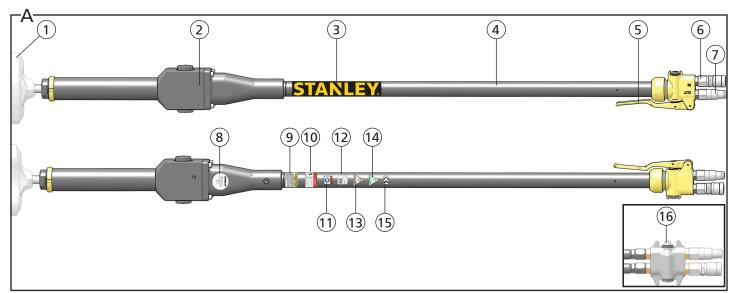
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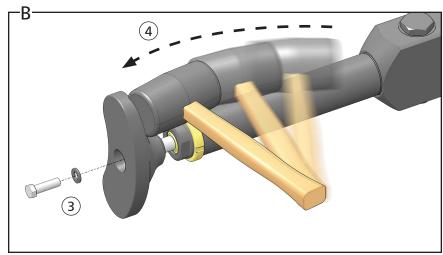
 Representative in the Union: Patrick Vervier, Stanley Dubuis 17-19, rue Jules Berthonneau-BP 3406 41034 Blois Cedex, France. Vertreter in der Union/Représentant dans l'union/Representante en la Union/Rappresentante presso l'Unione

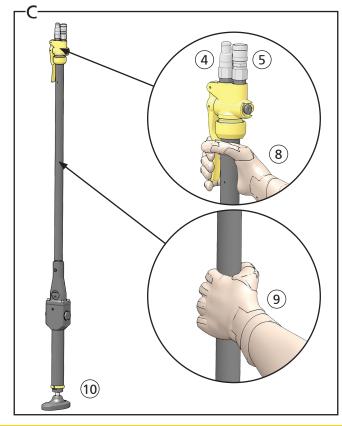
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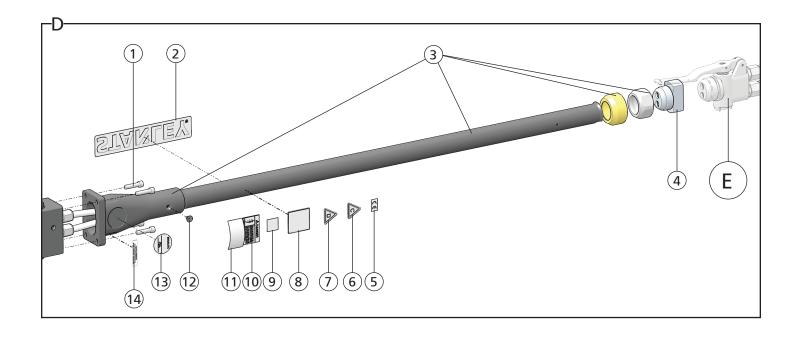
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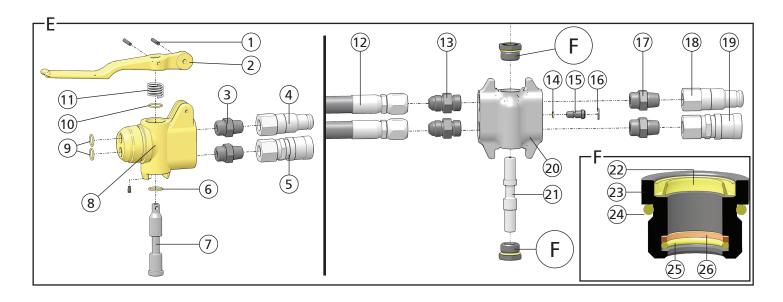
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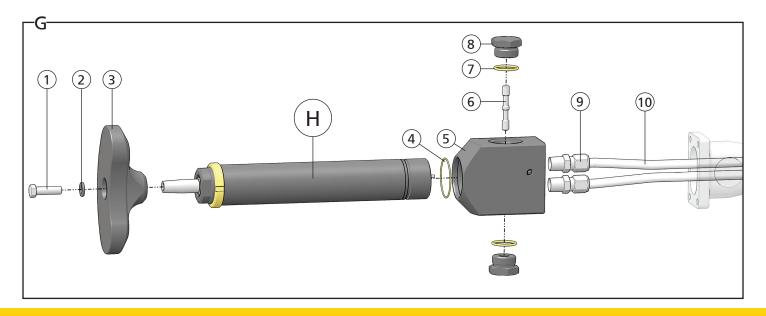






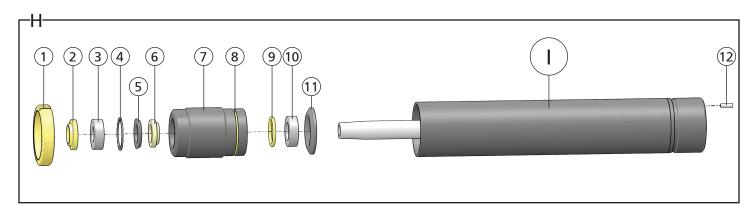


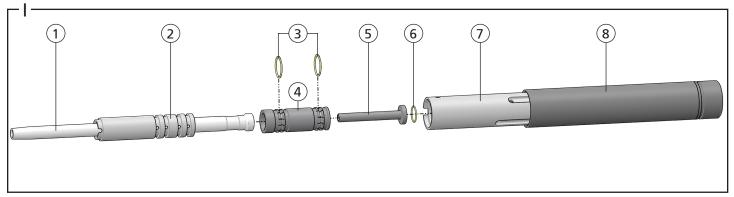




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TA54 Handle Illustration - Detail D			
ITEM	P/N	DESCRIPTION	
1	00144	Cap Screw	
2	74707	STANLEY Logo Decal	
3	07737	Handle Assembly	
4	35036	Hose Block - Models TA54603 & TA54603A	
5	28323	CE Decal	
6	11206	Circuit Type "C" Decal	
7	11207	Circuit Type "D" Decal	
8	88358	Sound Power Decal	
9	88348	"Read the Manual" Decal	
10	12412	Electrical Danger Decal	
11	03783	GPM Decal	
12	02529	Cap Screw	
13	74699	Tool Name Tag	
14	88344	Importer Decal - Model TA5410301	
15	02030	TA54 No Handle Trigger Seal Kit - Not Shown (*In seal kit)	
16	02032	TA54 Handle Trigger Seal Kit - Not Shown (**In seal kit)	

TA54	TA54 Trigger Illustration - Detail E & F		
ITEM P/N		DESCRIPTION	
TA54103, TA5410301, TA5410318 & TA54113 - Detail D		0301, TA5410318 & TA54113 - Detail D	
1	00114	Roll Pin	
2	04525	Trigger	
3	00936	Adapter	
	56725	Hose Whip (Model TA5410318)	

TA54 Trigger Illustration - Detail E & F			
ITEM	P/N	DESCRIPTION	
4	03973	Male Coupler	
5	03972	Female Coupler	
6	07627	O-ring* / **	
7	04098	Valve Spool	
8	04897	Valve Body Assembly	
9	00175	O-ring**	
10	07627	O-ring* / **	
11	04097	Compression Coil	
	TA!	54603A Trigger - Detail D	
12	35784	Hose Assembly	
13	00856	Adapters	
14	00026	O-ring	
15	10536	Selector Screw	
16	16070	Retaining Ring	
17	00936	Adapters	
18	03973	Male Coupler	
19	03972	Female Coupler	
20	67007	Inline Valve Body	
21	67008	Valve Spool	
	TA54603A Seal Cap - Detail F		
22	56747	Seal Wiper	
23	56749	Seal Cap	
24	01604	O-ring	
25	07626	O-ring	
26	07224	Backup ring	

TA54	TA54 Trigger Illustration - Detail E & F		
ITEM	P/N	DESCRIPTION	
27	02030	TA54 No Handle Trigger Seal Kit - Not Shown (*In seal kit)	
28	02032	TA54 Handle Trigger Seal Kit - Not Shown (**Ii seal kit)	

TA54 Lower Body Illustration - Detail G			
ITEM	P/N	DESCRIPTION	
1	00845	Tool Retaining Bolt - Torque to 41 Ft. Lbs. (54 Nm)	
2	00825	Lock Washer	
3	00833	Kidney Shaped Tamper Shoe	
	00840	Round Tamper Shoe - Model TA54113	
4	00178	O-ring	
5	34684	Valve Assembly	
6	00819	Reversing Spool	
7	06533	O-ring* / **	
8	14882	End Cap	
9	01236	Tube Fitting	
10	07738	Oil Tube	
11	02030	TA54 No Handle Trigger Seal Kit - Not Shown (*In seal kit)	
12	02032	TA54 Handle Trigger Seal Kit - Not Shown (**In seal kit)	

TA54 I	TA54 Nose Illustration - Detail H		
ITEM	P/N	DESCRIPTION	
1	01795	Jam Nut	
2	15016	Rod Wiper* / **	
3	08434	Felt Washer* / **	
4	04902	Retaining Ring	
5	14884	Seal Washer	
6	14891	Rod Wiper* / **	
7	14883	Nose	
8	01262	O-ring* / **	
9	00834	O-ring* / **	
10	00823	Piston Cushion	
11	01038	Thrust Washer	
12	01749	Roll Pin	
13	02030	TA54 No Handle Trigger Seal Kit - Not Shown (*In seal kit)	
14	02032	TA54 Handle Trigger Seal Kit - Not Shown (**In seal kit)	

TA54 I	TA54 Piston Assembly Illustration - Detail I		
ITEM	P/N	DESCRIPTION	
1	14886	Piston	
2	01037	Front Sleeve	
3	29690	Oil Control Seal* / **	
4	00927	Back Sleeve	
5	00806	Oil Tube	
6	00940	O-ring* / **	

TA54 Piston Assembly Illustration - Detail I		lustration - Detail I		
	ITEM P/N		DESCRIPTION	
	7	01036	Flow Sleeve	
	8	01787	Outer Tube	
	9	02030	TA54 No Handle Trigger Seal Kit - Not Shown (*In seal kit)	
	10	02032	TA54 Handle Trigger Seal Kit - Not Shown (**In seal kit)	

# Safety Precautions

A	The Safety Alert Symbol alerts you to potential personal injury hazards. Obey all safety messages that follow to avoid possible injury or death.	
<b>▲</b> DANGER	Indicates an imminently hazardous situation which will result in death or serious injury.	
<b>A</b> WARNING	Indicates a potentially hazardous situation which could result in death or serious injury	
CAUTION	Indicates a potentially hazardous situation which could result in property damage.	

Always observe safety symbols. They are included for your safety and for the protection of the tool.



WARNING: Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in tool damage and/or serious injury.

WARNING: To reduce the risk of injury, read the instruction manual.

#### General

- Do not discard safety instructions. Give to the operator.
- This tool will provide dependable service if operated in accordance with the instructions given in this manual. Read and understand this manual and any stickers and tags attached to the tool and hoses before operation. Failure to do so could result in personal injury or equipment damage.
- Inspect the tool before each use and ensure all decals are legible. Contact STANLEY if replacements are needed.
- Establish a training program for all operators to ensure safe operation. Do not operate the tool unless thoroughly trained or under the supervision of an instructor. Keep out of the reach of children.
- Operators and maintenance personnel shall be able to physically handle the bulk, weight and power of the tool.
- Avoid unsuitable postures as these positions do not allow for counteracting of normal or unexpected movement of the tool, such as a sudden break of the tool bit. Change postures during extended tasks to help avoid discomfort or fatigue.
- Never use the tool unless the inserted tool is retained with a proper retainer.
- Do not operate a damaged, improperly adjusted, modified or incompletely assembled tool.
- Use and maintain the tool as stated in this manual. Misuse of the tool can cause serious injury. Do not modify the tool in any way.
- Do not operate the tool in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Provide adequate ventilation in closed areas when operating a gas or diesel hydraulic power source.
- Do not inspect, carry, clean, change accessories or perform maintenance on the tool while the power source is connected. Accidental engagement of the tool can cause serious injury.
- Ensure work piece is securely fixed. Be aware that failure of the work piece or accessories may generate high velocity projectiles.
- Never use the tool bit as a hand struck tool.
- Stay alert, watch what you are doing and use common sense when operating a hydraulic tool. Do not operate this tool if you are tired or under the influence of drugs or alcohol. A moment of inattention while operating hydraulic tools may result in serious injury.
- During operation, do not contact mechanisms, accessories or hardware as they can become very hot or sharp; use your Personal Protection Fauinment (PPF)
- Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations.
- Never operate the tool if you are unsure about the presence of underground utilities, such as electrical cables, gas pipes, etc. These can cause a hazard if damaged with the tool.
- The tool is not insulated against coming into contact with electric power. Use hose certified as non-conductive.
- Do not overreach. Maintain proper footing and balance at all times when using the tool.

- Slips, trips and falls are major causes of workplace injury. Be observant of hoses or oil surfaces lying about the work area, as they can be a tripping hazard.
- Operators must start in a work area without bystanders and must assess the risks to bystanders.
- Keep work area clean and well lit. Cluttered or dark areas invite
- Operators must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.
- Only use clean hydraulic fluid, filling equipment and lubricants that have been recommended by STANLEY.
- Ensure tools are working properly and safely by performing preventative maintenance (PM) procedures.
- Repair and service of this tool must only be performed by an authorized and certified dealer
- Do not force the tool to do the work of a larger tool. Use the correct tool for your application.
- Use only hoses and hose couplings that are rated for a minimum working pressure of 2500 PSI (172 BAR).
- In spite of the application of relevant safety regulations and the implementation of safety devices, certain residual risks cannot be avoided. These risks are: repetitive strain injury due to incorrect posture and risk of pinching fingers when changing tool bit.

#### **Dust and Fumes**

- WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
  - Lead from lead-based paints,
  - crystalline silica from bricks and cement and other masonry products, and
  - arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. Protect yourself and those around you. Research and understand the materials you are grinding. Follow correct safety procedures and comply with all applicable national, state or provisional health and safety regulations relating to them, including, if appropriate arranging for the safe disposal of the materials by a qualified person.

- When dust or fumes are created, control them at the point of emission. Direct tool exhaust to minimize disturbance of dust.
- Operate and maintain the tool as recommended in this manual to minimize dust.
- Use respiratory protection in accordance with employers instruction or as required by occupational health and safety regulations.
- Avoid prolonged contact with dust. Allowing dust to get into your mouth, eyes or lay on the skin may promote absorption of harmful chemicals.

#### **PPE**

- Always wear safety equipment such as impact resistant goggles, ear protection, head protection, breathing protection and safety shoes at all times when operating the tool.
- Hands may be exposed to hazards, impacts, cuts, abrasions and heat. Wear gloves.
- Wear a hardhat if performing overhead work.
- Use PPE that conforms to standards ANSI Z87.1 (Eye and Face Protection), ANSI Z89.1 (Head Protection), ANSI Z41.1 (Foot Protection) and ANSI S12.6 (S3.19) (Hearing Protection).
- Do not wear loose fitting clothing or jewelry when operating the tool.



Protection





Wear Eye Protection

Wear a Mask

# Sound

Exposure to high noise levels can cause permanent, disabling hearing

loss and other problems, such as tinnitus (ringing, buzzing, whistling or humming in the ears). Use hearing protection in accordance with employer's instructions and as required by occupational health and safety regulations.

• Use and maintain as recommended in the manual to prevent an unnecessary increase in noise levels.

#### Vibration

- When using a non-rotary percussive tool to perform work related activities, the operator can experience discomfort in the hands, arms, shoulders, neck or other parts of the body.
- If you experience numbness, tingling, pain or whitening of the skin in your fingers or hands, stop using the tool. Tell your employer and consult a physician.
- Wear warm clothing when working in cold conditions and keep your hands warm and dry.
- Exposure to vibration can cause disabling damage to the nerves and blood supply of the hands and arms.
- Use and maintain as recommended in the manual to prevent an unnecessary increase in vibration.
- Check for vibration level before each service. If you feel a higher than normal vibration, contact your STANLEY dealer for repair.

# Hydraulic

- Warning: Hydraulic fluid under pressure could cause skin injection injury. Do not check for leaks with your hands. If you are injured by hydraulic fluid, get medical attention immediately.
- Do not let hydraulic oil get on the skin. Hydraulic oil is hot. Wear Personal Protection Equipment (PPE) at all times.
- If exposed to hydraulic fluid, wash hands immediately.
- Do not exceed the maximum relief valve setting stated on the tool.
- Inspect and clean couplers before use, daily. Replace damaged couplers immediately.
- Hydraulic circuit control valve must be OFF before coupling or uncoupling tools. Failure to do so may damage the couplers and cause overheating of the hydraulic system.
- Ensure the couplers are properly connected and are tight.
- Do not operate the tool at fluid temperatures above 140°F (60°C).
   Higher temperatures can cause operator discomfort and damage to the tool
- Do not exceed the rated flow and pressure as stated on the tool. Rapid failure of the internal seals may result.

# What is TA54 Hydraulic Tamper?

TA54 is a hand held hydraulic tool used to compact soil around utility poles, signs and fence posts. TA54 requires an external hydraulic power supply capable of supplying 3-9 GPM @ 1000-2000 PSI.

Specifications	
Pressure	1000-2000 PSI (69-138 BAR)
Flow	3-9 GPM (11-34 LPM)
Hydraulic Circuit Type	Open Center
Max. Relief Pressure	2250 PSI (155 BAR)
Recommended Back Pressure	250 PSI (17 BAR) or less
Couplers	3/8 Inch NPT Flush Face
Port Size	1/2 Inch SAE O-ring
Min. Hose Pressure Rating	2500 PSI (172 BAR)
Max. Hydraulic Oil Temp.	140°F (60°C)
Tool Weight	25 Lbs.
Tool Size	71 Inches x 4 Inches x 4 Inches
HTMA/EHTMA Category	Type I & II, Category C & D

Sound & Vibration Declaration		
Measured A-Weighted sound power	108.38 dBA	
Measured A-Weighted Sound Pressure	97.39 dBA	
Values determined according to noise test code given in ISO 15744, 11203 and 3744. Test conducted by independent notified body to comply with 2000/14/EC:2006.		
Trigger Handle		
Measured Vibration Emission Value: 3-Axis	58.9 m/sec <sup>2</sup>	
Uncertainty	13.2 m/sec <sup>2</sup>	
Support Handle		
Measured Vibration Emission Value: 3-Axis	59.6 m/sec <sup>2</sup>	
Uncertainty	13.2 m/sec <sup>2</sup>	
Values determined according to ISO 28927-6		

# Parts of a TA54 - Detail A

1	Tamper Shoe
2	Serial Number & Year of Manufacture
3	STANLEY Logo Decal
4	Handle Tube
5	Trigger
6	Female Coupler
7	Male Coupler
8	Tool Name Tag
9	GPM Decal
10	Electrical Danger Decal
11	"Read the Manual" Decal
12	Sound Power Decal
13	Circuit Type "D" Decal
14	Circuit Type "C" Decal
15	CE Decal
16	Trigger - Model TA54603A

## Tool Setup - Detail B

# **AWARNING**

Do not install or change tool accessories while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury. Disconnect the hydraulic power source before installing or changing accessories.

1. Disconnect the tool from the hydraulic power source.

#### **Install Tamper Shoe**

Note: TT54 ships with a tamper shoe installed.

- 2. Lay TT54 on a workbench.
- Remove the retaining bolt and washer from the bottom of the tamper shoe.
- 4. Using a soft faced mallet, lightly strike the top of the shoe to remove it from the piston.
  - Fit the new tamper shoe onto the piston.
- 5. Thread the retaining bolt through the tamper shoe and into the piston.
- 7. Torque to 41 Ft. Lbs. (54 Nm). Ensure the tamper shoe is locked into place.

# **AWARNING**

Never operate the tool unless the tamper shoe is retained. Shoe can become a high velocity projectile. Secure the shoe as shown in this manual.

# Tool Operation - Detail C

#### Connect to a Hydraulic Power Source

- Using a calibrated flow and pressure gauge, check the output of the hydraulic power source. Ensure it matches the flow and pressure in "Specifications" on page 8. Hydraulic fluid must be 50°F or above. Preheat if necessary.
- Ensure that the hydraulic power source is equipped with a relief valve set to open at the maximum relief pressure. See "Specifications" on page 8.
- 3. Wipe hose couplers with a clean, lint free cloth.
- 4. Connect the return hose to the male coupler.
- 5. Connect the pressure hose to the female coupler.
- 6. Ensure couplers are undamaged, properly connected and are tight. Note: TA54 will rise quickly when hydraulic power is first turned on. Do not stand over, or place any part of your body, over the tamper.
- 7. Power up the hydraulic power source.

#### Using the Tool

- 8. Place your dominant hand on the handle tube, over the trigger.
- Place you non-dominant hand lower on the handle tube, where you can best control the tool.
- Place the tamper shoe on the ground to be compacted, at a 90° angle.
   Apply down pressure.

Note: Maintain a balanced body position and secure footing while operating tool. Do not put hands, feet or other body parts under the tamping shoe. Personal injury could result.

 Slowly squeeze the trigger to start compacting. Squeeze harder for fast speed operation. Guide the tamper using both hands on the handle tube.

Note: Hold the tool correctly and be ready to counteract normal or sudden movements. Have both hands available.

12. Release the trigger to immediately stop the tool.

Note: If you encounter a breakdown or the tool stops for any reason, release the trigger and power down the hydraulic power source.

#### **Tool Maintenance**

Use only accessories, consumables and parts recommended by STANLEY.

# **AWARNING**

Do not perform maintenance while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury. Disconnect the hydraulic power source before performing maintenance.

#### **Daily Maintenance**

- 1. Remove hydraulic power from the tool.
- Check all hydraulic connections and hoses for damage. Replace damaged parts before operating the tool.
- 3. Inspect the tamper shoe, retaining bolt and associated parts. Replace when they have become worn, cracked or distorted.
- Inspect tool to ensure all decals are legible. Contact STANLEY if replacements are needed.
- Using a calibrated flow and pressure gauge, check the output of the hydraulic power source. Ensure it matches the flow and pressure in "Specifications" on page 8. Proper flow and pressure maintain proper tool speed.

# **Tool Storage & Transport**

Drain the tool of hydraulic fluid and plug open hydraulic ports. Collect all hydraulic fluid for recycling (See "Tool Disposal" on page 9). Clean the tool and store in a clean, dry space that is safe from damage. Disconnect the tool from the hydraulic power source during transport. Do not carry the tool by the hydraulic hoses and ensure the tool will not move during transport. An unsecured tool could cause personal injury or damage to the tool.

# **Tool Disposal**

#### Hydraulic Oil

Hydraulic oil can contaminate the air, ground and water if not properly recycled. Recycle hydraulic oil in accordance with all State, Federal and local laws, at your local oil recycling facility.

#### **Hydraulic Hoses**

Hang hydraulic hoses to drain. Collect the oil for recycling. Contact your local municipal recycling authorities for an approved hydraulic hose recycling site.

#### **Tool Body**

Drain hydraulic oil from the tool, making sure to collect the oil for recycling. Disassemble the tool and dispose of all non-metal parts. Recycle the metal components. Contact your local municipal recycling authorities for recycling instructions.

#### **Accessories**

TA54 Accessories				
Description	Part Number			
Tamper Shoe, Kidney Shaped	00833			
Tamper Shoe, Round, 6 Inch Ø	00840			
Tamper Shoe, Rectangular	01070			
8 Foot Hose (2 are required to run tool)	35784			
In-line Valve, Open Center / Closed Center	72264			
Service Tools				
Tamper Sleeve Tool	01120			
Sleeve Installation Wrench	01949			
O-ring Tool Kit	04337			

# Troubleshooting

Problem	Possible Cause	Solution	
	Hydraulic power source is not running properly.	Ensure the power source is delivering proper flow and pressure. See "Specifications" on page 8. Proper flow and pressure maintain proper tool speed. Check regularly.	
	Hydraulic hoses incorrectly connected to the tool.	Ensure the return and pressure hoses are properly attached to the tool. See "Connect to a Hydraulic Power Source" on page 8.	
Tool doesn't run, runs slowly or has low power.	Couplers or hoses are blocked.	Turn off and disconnect the tool from the hydraulic power source. Inspect and ensure no blockage exists.	
	Back pressure is too high.	Check the hydraulic system for excessive back pressure. Do not exceed back pressure shown in "Specifications" on page 8.	
	Hydraulic fluid is too hot.	Provide cooler to maintain proper fluid temperature.	
	Tool Failure	Contact your STANLEY dealer for service.	
	Hydraulic hoses incorrectly connected to the tool.	Ensure the return and pressure hoses are properly attached to the tool. See "Connect to a Hydraulic Power Source" on page 8.	
Piston extends, but does not retract.	Back pressure is too high.	Check the hydraulic system for excessive back pressure. Do not exceed back pressure shown in "Specifications" on page 8.	
	Tool Failure	Contact your STANLEY dealer for service.	
Hydraulic oil leaks from the piston or trigger.	Seal failure.	Contact your STANLEY dealer for service.	

# **STANLEY**®

STANLEY Infrastructure 6430 SE Lake Road, Portland, Oregon 97222 USA (503) 659-5660 / Fax (503) 652-1780 www.stanleyinfrastructure.com